

C O M M U N I C A B L E D I S E A S E S U M M A R Y

1936 -- 1948

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North Dakota State Department of Health
Bismarck, North Dakota

WC
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1948

G 28 Mar 1950

	No. Cases	No. per 100,000 Population	No. Deaths	No. per 100,000 Population
1936-1940*	767	120.4	10	1.3
1941-1945*	1025	168.6	13	1.1
1946	308	57.4	0	0
1947	553	100.2	0	0
1948				

The tables appearing in this report have been compiled for the purpose of giving a general summary of the incidence of some of the more common communicable diseases in the State of North Dakota in recent years.

These data include the average number of cases and deaths reported for two five-year periods from 1936 to 1945 inclusive, and for individual years from 1946 to 1948 inclusive. The 1948 death figures are provisional.

The tables also include number of cases by months of occurrence. Pneumonia and influenza have been grouped together due to the coding on the death certificates.

	No. Cases	No. per 100,000 Population	R. O. Saxvik, M.D., State Health Officer
1936-1940*	53	12.9	
1941-1945*	145	39.1	
1946	64	15.7	
1947	77	10.3	
1948	33	5.9	

Number of Cases Reported by Month

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1936-1940*	6.2	5.3	6.0	3.4	3.8	3.0	8.2	9.3	6.1	11.2	10.2	8.3
1941-1945*	14.2	4.3	5.3	5.1	4.0	4.2	7.0	9.6	7.0	9.2	15.4	22.0
1946	13	12	9	6	4	1	2	3	2	13	2	12
1947	5	6	17	8	5	1	6	3	2	3	9	9
1948	3	2	3	3	1	3	2	1	6	2	8	7

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* 5-year average

CHICKENPOX

<u>No. Cases</u>	<u>Rate per 100,000 Population</u>	<u>No. Deaths</u>	<u>Rate per 100,000 Population</u>
1936-1940*	967	150.4	1.0
1941-1945*	1025	186.0	.8
1946	308	57.4	-
1947	553	100.2	-
1948	701	125.2	-

Number of Cases Reported by Months

1936-1940	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1936-1940*	138	94	93	82	107	64	32	13	14	75	112	139
1941-1945*	166	130	112	93	90	53	29	11	8	66	118	142
1946	56	54	31	22	28	15	16	3	8	9	31	35
1947	22	27	64	53	50	32	3	6	10	39	74	173
1948	76	91	73	49	65	21	8	6	6	46	133	127

DIPHTHERIA

<u>No. Cases</u>	<u>Rate per 100,000 Population</u>	<u>No. Deaths</u>	<u>Rate per 100,000 Population</u>
1936-1940*	83	12.9	7.4
1941-1945*	105	19.1	6.8
1946	84	15.7	7
1947	57	10.3	5
1948	33	5.9	6

Number of Cases Reported by Months

1936-1940	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1936-1940*	6.2	5.3	6.0	3.4	3.4	3.0	8.2	9.3	6.1	11.2	10.2	8.3
1941-1945*	14.2	4.3	5.3	5.1	4.0	4.2	7.0	5.6	7.8	9.2	15.4	22.0
1946	13	12	9	6	4	1	2	8	2	13	2	12
1947	5	6	7	2	5	1	5	3	2	3	9	9
1948	3	2	3	3	1	3	2	1	4	2	8	2

* 5-year average

DISENTERY

	<u>No. Cases</u>	<u>Rate per 100,000 Population</u>	<u>No. Deaths</u>	<u>Rate per 100,000 Population</u>
1936-1940*	5	.8	5	.8
1941-1945*	8	1.5	1.6	.3
1946	6	1.1	6	1.1
1947	34	6.2	3	0.5
1948	59	10.5	1	0.2

Number of Cases Reported by Months

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1936-1940*	0	0	0	.2	0	.2	0	.2	2.4	.6	1.0	0
1941-1945*	.4	.2	0	.6	.2	.2	.4	.4	4.3	.8	.4	0
1946	0	4	0	0	0	2	0	0	0	0	0	0
1947	1	0	0	1	1	8	3	2	0	1	8	9
1948	6	14	24	14	0	0	1	0	0	0	0	0

ENCEPHALITIS

	<u>No. Cases</u>	<u>Rate per 100,000 Population</u>	<u>No. Deaths</u>	<u>Rate per 100,000 Population</u>
1936-1940*	32	4.9	12	1.9
1941-1945*	243	44.0	37.4	6.8
1946	14	2.6	2	0.4
1947	89	16.1	13	2.4
1948	35	6.2	5	0.9

Number of Cases Reported by Months

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1936-1940*	0	.2	0	.4	1.4	1.8	1.0	7.4	14.8	3.0	1.2	.4
1941-1945*	1.6	1.0	.8	.8	2.6	4.0	63.4	154.2	8.8	3.2	1.4	.8
1946	1	0	0	0	0	0	0	6	.3	2	2	0
1947	0	0	0	0	0	0	0	44	32	7	4	2
1948	1	3	0	0	1	1	2	16	5	3	3	0

* 5-year average

GONORRHEA

	<u>No. Cases</u>	<u>Rate per 100,000 Population</u>	<u>No. Deaths</u>	<u>Rate per 100,000 Population</u>
1936-1940*	504	78.4	2.6	.4
1941-1945*	403	73.1	-	0
1946	556	103.7	-	0
1947	299	54.2	1	0.2
1948	205	36.6	--	0

Number of Cases Reported by Months

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1936-1940*	37.4	40.0	39.8	44.8	41.4	40.6	40.0	39.0	46.4	44.8	45.6	44.4
1941-1945*	31.0	23.4	32.8	26.4	30.0	32.0	41.6	44.0	40.2	35.8	36.6	28.8
1946	96	48	70	35	38	64	51	80	42	29	29	26
1947	23	30	21	41	29	21	16	23	18	19	19	39
1948	9	10	15	13	9	22	12	18	33	25	14	25

INFLUENZA AND PNEUMONIA

	<u>No. Cases</u>	<u>Rate per 100,000 Population</u>	<u>No. Deaths</u>	<u>Rate per 100,000 Population</u>
1936-1940*	1609	250.2	480.6	74.7
1941-1945*	4364	791.9	275.6	50.0
1946	1419	265.0	189	35.2
1947	1421	257.4	239	43.3
1948	972	173.6	160	28.6

Number of Cases Reported by Months

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1936-1940*	315.2	136.0	467.6	171.2	76.0	72.0	19.0	19.0	30.0	35.6	74.0	193.2
1941-1945*	621.4	406.2	303.6	283.2	275.6	133.2	88.2	102.6	85.8	126.0	150.8	178.0
1946	257	140	228	117	102	85	63	65	49	107	92	114
1947	227	147	462	140	83	40	20	13	30	65	51	143
1948	28	77	133	92	141	56	83	37	75	49	64	137

* 5-year average

MEASLES

	<u>No. Cases</u>	<u>Rate per 100,000 Population</u>	<u>No. Deaths</u>	<u>Rate per 100,000 Population</u>
1936-1940*	1663	258.7	9	1.4
1941-1945*	2427	440.5	12.6	2.3
1946	239	44.6	-	0
1947	1644	297.8	2	0.4
1948	1538	274.6	7	1.2

Number of Cases Reported by Months

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1936-1940*	266.8	220.8	110.2	185.0	134.2	65.6	45.0	10.6	19.8	92.0	224.2	289.0
1941-1945*	396.0	301.8	317.6	218.4	243.4	74.6	85.0	28.6	30.0	211.0	211.8	309.2
1946	4	6	58	30	42	38	31	5	8	4	10	3
1947	9	10	55	30	393	183	78	40	33	76	181	556
1948	208	209	121	84	154	187	73	25	38	115	102	222

MENINGITIS

	<u>No. Cases</u>	<u>Rate per 100,000 Population</u>	<u>No. Deaths</u>	<u>Rate per 100,000 Population</u>
1936-1940*	15	2.4	6.8	1.1
1941-1945*	25	4.6	5.4	1.0
1946	20	3.7	3	0.6
1947	15	2.7	7	1.3
1948	22	3.9	7	1.2

Number of Cases Reported by Months

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1936-1940*	1.4	2.4	1.6	1.8	1	.6	1.8	1.2	1	1.6	.2	.8
1941-1945*	3.4	3.0	2.6	3.4	2.6	1.0	2.6	1.2	.8	1.2	1.4	2.0
1946	3	4	3	0	1	2	1	1	0	2	0	3
1947	1	1	2	3	3	0	1	1	0	0	0	3
1948	4	1	1	0	5	0	5	0	2	1	3	0

* 5 - year average

POLIOMYELITIS

	<u>No. Cases</u>	<u>Rate per 100,000 Population</u>	<u>No. Deaths</u>	<u>Rate per 100,000 Population</u>
1936-1940*	18	2.8	1.2	.2
1941-1945*	26	4.8	2.2	.4
1946	492	91.7	28	5.2
1947	84	15.2	2	.4
1948	130	23.2	8	1.4

Number of Cases Reported by Months

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1936-1940*	.4	.6	.4	0	0	.2	1.8	2.6	5.8	5.2	2.2	1.0
1941-1945*	1.2	.4	.4	.2	0	.4	1.6	7.0	7.0	4.4	1.8	1.8
1946	0	1	0	1	0	2	61	221	129	50	17	10
1947	0	4	6	3	4	4	16	31	6	3	3	4
1948	1	0	0	0	2	1	6	49	38	19	7	7

SCARLET FEVER

	<u>No. Cases</u>	<u>Rate per 100,000 Population</u>	<u>No. Deaths</u>	<u>Rate per 100,000 Population</u>
1936-1940*	1165	181.1	14.4	2.2
1941-1945*	629	114.2	2	.4
1946	303	56.5	-	0
1947	335	60.7	1	0.2
1948	265	47.3	3	0.5

Number of Cases Reported by Months

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1936-1940*	173.4	191.2	137	103.4	98.4	51.6	23.0	15.8	30.8	86.6	123.4	130.0
1941-1945*	79.2	95.8	114.8	87.4	54.2	27.4	12.4	9.4	19.0	30.2	46.4	51.2
1946	41	28	71	41	34	10	7	4	2	21	19	25
1947	35	51	65	16	22	13	12	8	22	20	30	41
1948	20	24	28	17	19	4	7	7	15	19	40	65

* 5-year average

SMALLPOX

	<u>No. Cases</u>	<u>Rate per 100,000 Population</u>	<u>No. Deaths</u>	<u>Rate per 100,000 Population</u>
1936-1940*	327	50.8	1	0.0
1941-1945*	7	1.3	-	0.4
1946	1	.2	-	0.0
1947	4	.7	-	0.0
1948	3	.5	-	0.0

Number of Cases Reported by Months

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1936-1940*	60.4	39.4	22.8	36.8	32.2	26.0	18.2	6.4	8.4	25.9	27.8	22.4
1941-1945*	.6	0	.6	.8	1.2	1	.8	.2	.2	.4	.4	1.2
1946	0	0	0	0	0	0	0	0	0	0	1	0
1947	0	0	0	2	0	1	0	0	0	1	0	0
1948	0	0	1	0	0	0	1	0	0	0	0	1

SYPHILIS

	<u>No. Cases</u>	<u>Rate per 100,000 Population</u>	<u>No. Deaths</u>	<u>Rate per 100,000 Population</u>
1936-1940*	355	55.3	23	3.6
1941-1945*	304	55.1	25.4	4.6
1946	271	50.5	27	5.0
1947	318	57.6	16	2.9
1948	307	54.8	17	3.0

Number of Cases Reported by Months

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1936-1940*	28.4	26.0	32.4	28.6	30.0	32.6	28.8	28.6	26.8	30.8	36.4	31.2
1941-1945*	24.4	24.6	27.6	21.4	30.8	24.2	21.8	34.2	23.4	24.0	27.2	20.0
1946	35	40	29	6	15	25	31	47	36	18	17	19
1947	29	45	12	35	29	35	13	27	19	28	23	23
1948	33	30	36	37	26	21	16	24	28	19	12	25

* 5-year average

TUBERCULOSIS

	<u>No. Cases</u>	<u>Rate per 100,000 Population</u>	<u>No. Deaths</u>	<u>Rate per 100,000 Population</u>
1936-1940*	283	44.0	151.2	23.5
1941-1945*	359	65.2	112.6	20.4
1946	197	36.7	86	16.0
1947	295	53.4	83	15.0
1948	346	61.8	59	10.5

Number of Cases Reported by Months

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1936-1940*	24.4	22.8	26.2	24.8	22.0	23.0	24.0	22.2	24.8	23.2	23.4	22.4
1941-1945*	22.2	29.4	26.4	37.6	32.6	25.6	48.6	40.8	23.6	22.2	25.2	25.0
1946	15	10	14	11	25	22	25	25	10	17	6	17
1947	14	22	19	27	21	27	28	21	40	29	13	34
1948	29	28	28	33	32	26	36	36	22	22	20	34

TYPHOID AND PARATYPHOID

	<u>No. Cases</u>	<u>Rate per 100,000 Population</u>	<u>No. Deaths</u>	<u>Rate per 100,000 Population</u>
1936-1940*	40	6.3	3.6	.6
1941-1945*	16	2.9	.8	.1
1946	19	3.5	-	0
1947	8	1.4	3	0.5
1948	14	2.5	-	0

Number of Cases Reported by Months

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1936-1940*	1.8	1.4	1.4	3.6	3.8	3.0	2.4	3.8	4.6	8.8	2.8	3.0
1941-1945*	.8	1.2	.6	1.2	2.4	1.6	1.6	2.4	1.6	2.0	.2	.6
1946	0	0	1	2	3	4	2	0	2	2	0	3
1947	1	1	2	0	0	0	0	2	2	0	0	0
1948	0	0	0	2	2	3	1	1	3	2	0	0

* 5-year average

UNDULANT FEVER

	<u>No. Cases</u>	<u>Rate per 100,000 Population</u>	<u>No. Deaths</u>	<u>Rate per 100,000 Population</u>
1936-1940*	4	.7	-	0
1941-1945*	15	2.8	.2	0.0
1946	15	2.8	1	0.2
1947	6	1.1	2	0.4
1948	5	.9	-	0

Number of Cases Reported by Months

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1936-1940*	.2	.4	.4	0	.2	.2	.2	.8	.6	.6	.2	.6
1941-1945*	.8	1.6	.4	2.2	.6	1.6	.6	2.0	1.2	1.6	1.0	1.6
1946	0	1	5	2	0	1	1	1	0	2	1	1
1947	1	0	0	0	1	0	1	1	0	1	0	1
1948	0	0	0	0	0	0	2	1	0	0	0	2

WHOOPING COUGH

	<u>No. Cases</u>	<u>Rate per 100,000 Population</u>	<u>No. Deaths</u>	<u>Rate per 100,000 Population</u>
1936-1940*	759	118.1	21.4	3.3
1941-1945*	553	100.3	9	1.6
1946	40	7.5	-	-
1947	415	75.2	8	1.4
1948	312	55.7	2	0.4

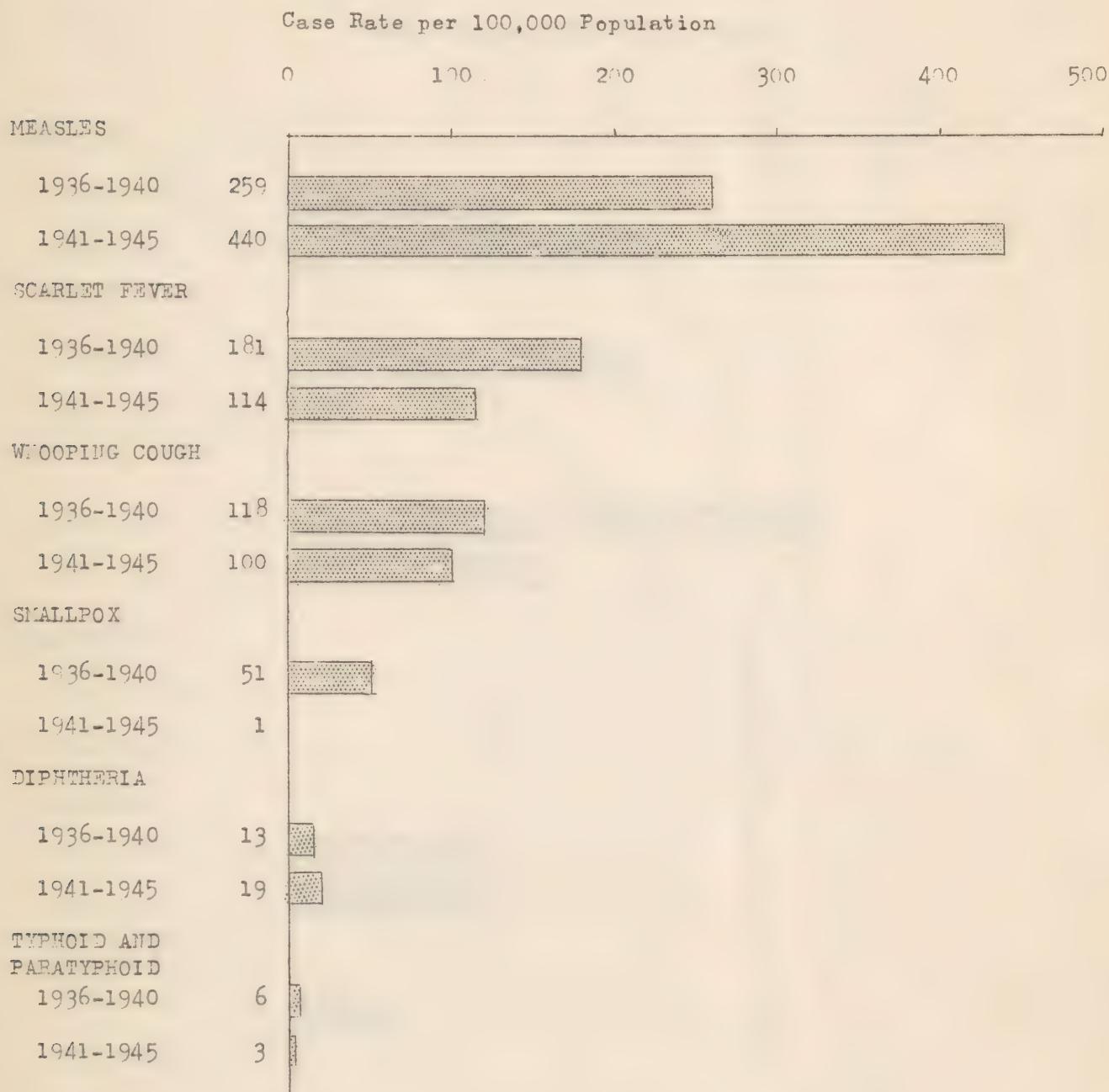
Number of Cases Reported by Months

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1936-1940*	67.8	49.4	42.2	42.8	36.0	46.8	107.8	87.8	89.2	77.6	62.6	49.4
1941-1945*	51.6	40.4	41.8	39.2	46.6	31.0	60.6	69.0	64.8	40.4	35.2	32.2
1946	4	2	1	3	3	5	3	3	9	2	3	2
1947	4	2	2	3	103	10	28	36	14	82	69	62
1948	45	83	48	16	13	15	21	15	9	3	31	13

* 5-year average

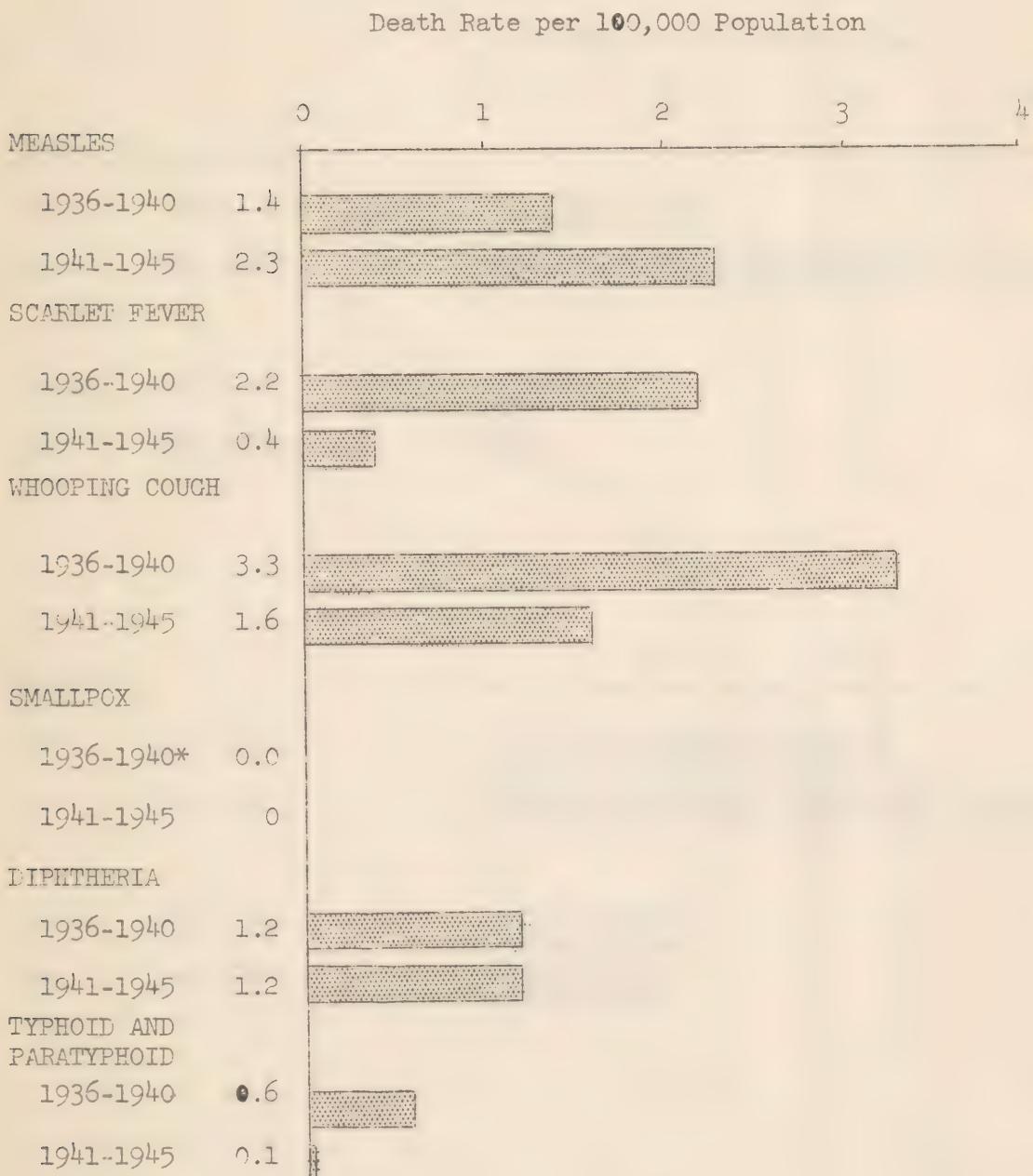
AVERAGE YEARLY CASE RATES FOR COMMUNICABLE DISEASES
NORTH DAKOTA, 1936-1940, 1941-1945

A comparison of communicable disease cases reported during two five year periods shows an increase in cases of measles and diphtheria, a decrease in scarlet fever, whooping cough, typhoid and paratyphoid, and a very notable reduction in smallpox cases.



AVERAGE YEARLY DEATH RATES FOR COMMUNICABLE
DISEASES, NORTH DAKOTA, 1936-1940, 1941-1945

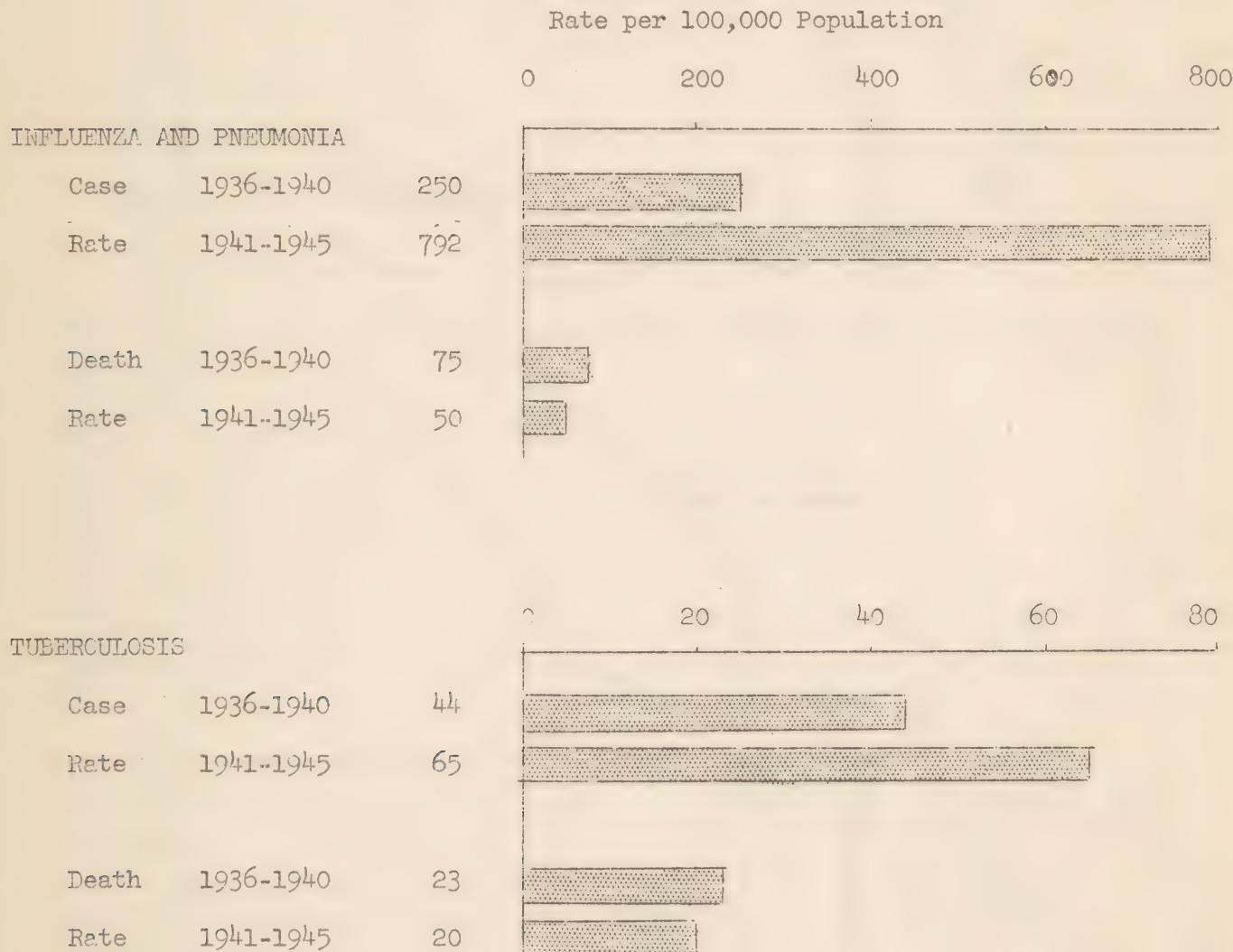
The death rates from communicable diseases may be compared with the previous chart which shows corresponding case rates. For most diseases, the decline in deaths has been greater than the decline in cases.



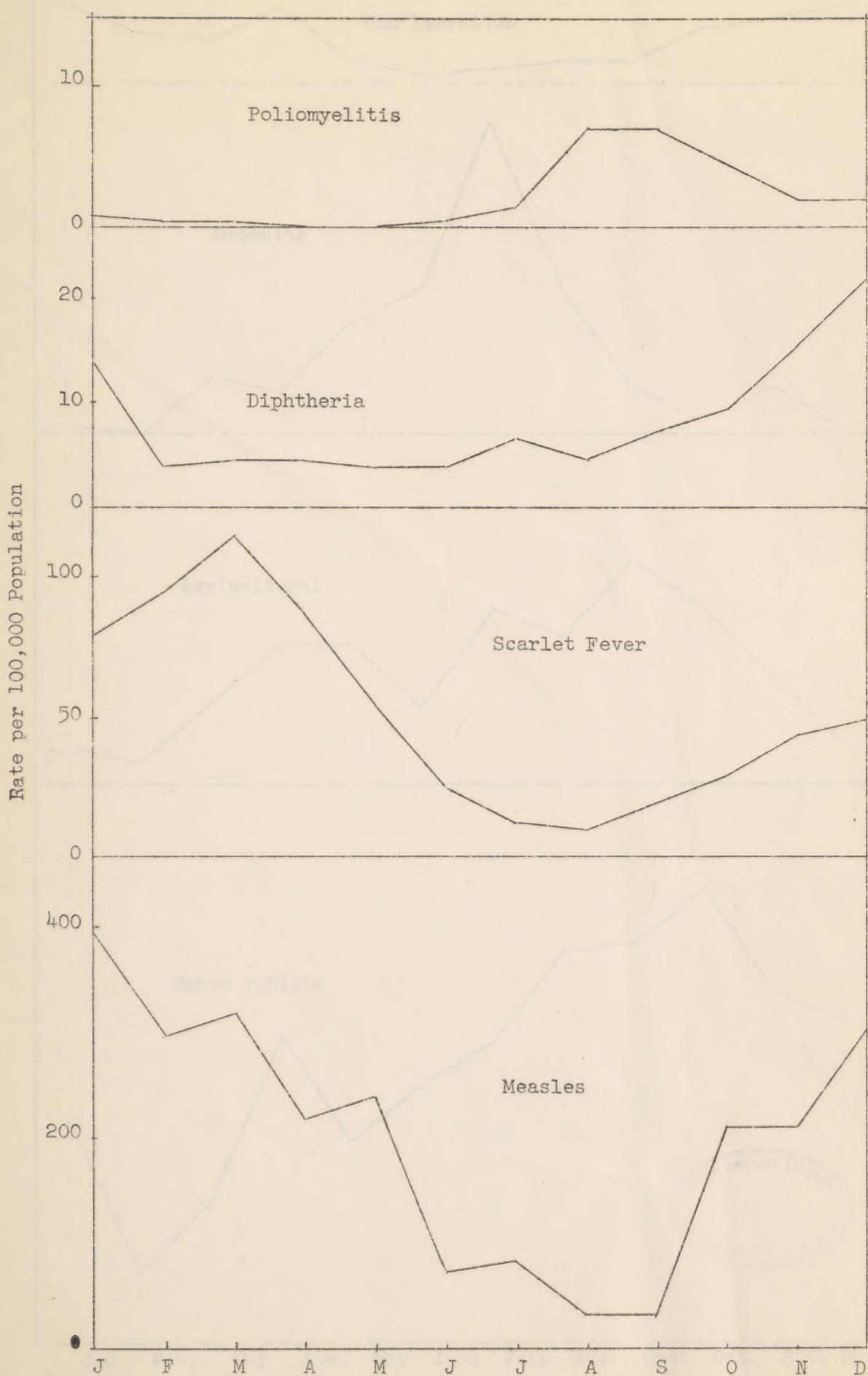
* One death, rate less than 0.1

AVERAGE YEARLY CASE AND DEATH RATES FOR COMMUNICABLE
DISEASES, NORTH DAKOTA, 1936-1940, 1941-1945

A comparison of the two five year periods shows that, while there were more than twice as many cases of influenza and pneumonia reported in the later period, there were fewer deaths. This is probably due to the more effective treatment with new drugs during recent years. There were also more cases of tuberculosis reported during the later period, but fewer deaths.



SEASONAL VARIATION IN COMMUNICABLE DISEASES
AVERAGE NUMBER OF CASES REPORTED, 1941-1945



Seasonal Variation in Accidental Deaths

